

CLAIMS AMENDMENTS

Please amend the claims as follows:

Claims 1-3 (cancelled)

4. (currently amended) An isolated nucleic acid encoding a mammalian alpha kinase expressed in the heart and having alpha kinase activity, wherein the nucleic acid is selected from the group consisting of:

- a. the DNA sequence of SEQ ID NO: 34; and
- b. ~~DNA sequences that hybridize to the sequence of subpart (a) under standard hybridization conditions; and~~
- e. DNA sequences capable of encoding the amino acid sequence encoded by the DNA sequences of subpart s (a) ~~or (b)~~.

5. (previously entered) An isolated nucleic acid encoding human alpha kinase, expressed in the heart and having alpha kinase activity, wherein the nucleic acid comprises the DNA sequence of SEQ ID NO: 34.

Claims 6-13 (cancelled)

14. (previously entered) A recombinant DNA expression vector comprising the nucleic acid of Claim 4, wherein the DNA encoding the alpha kinase is operatively associated with an expression control sequence.

15. (original) A transformed host cell transfected with the DNA vector of claim 14.

16. (currently amended) A unicellular host transformed with a recombinant DNA molecule comprising a DNA sequence which encodes a mammalian alpha kinase selected from the group

consisting of:

- a. the DNA sequence of {SEQ ID NO: 34};
 - b. ~~DNA sequences that hybridize to the foregoing DNA sequence under standard hybridization conditions;~~
 - c. DNA sequences that encode an amino acid sequence encoded by the DNA sequences of subpart s (a) ~~or (b)~~; and
 - d. a fragment of SEQ ID NO: 34 which encodes a mammalian alpha kinase polypeptide expressed in the heart and having alpha kinase activity;
- wherein said DNA sequence is operatively linked to an expression control sequence.

17. (original) The unicellular host of Claim 16 wherein the unicellular host is selected from the group consisting of *E. coli*, *Pseudomonas*, *Bacillus*, *Streptomyces*, yeasts, CHO, R1.1, B-W, L-M, COS 1, COS 7, BSC1, BSC40, and BMT10 cells, plant cells, insect cells, mouse cells and human cells in tissue culture.

Claims 18-48 (cancelled)

49. (new) An isolated nucleic acid encoding a mammalian alpha kinase comprising the amino acid sequence set out in SEQ ID NO: 35, expressed in the heart and having alpha kinase activity.